

AMENDMENT

In the Claims:

Please amend claims 29, 30, 32, 33, 39-42, 54, 100 and 101 as follows:

H1
29. (Amended) The composition of claim 24 [wherein] comprising a reverse transcriptase [comprises] which is both said DNA-dependent DNA polymerase and said RNA-dependent DNA polymerase.

H2
30. (Amended) The composition of claim 29 wherein said reverse transcriptase further comprises [said] RNase H activity.

H3
32. (Amended) The composition of claim 24 further comprising one or more selected from the group consisting of DMSO, dimethylformamide, ethylene glycol, zinc and glycerol.

33. (Amended) The composition of claim 24 [wherein said mixture] which allows amplification of said target nucleic acid sequence at essentially constant temperature.

Sub K1
H4
39. (Amended) A kit for amplifying *Mycobacterial* nucleic acid, containing at least one of a first and second oligonucleotide; said first oligonucleotide comprising xGCCGTCACCCACCAACAAGCT (SEQ ID: 1), and said second oligonucleotide comprising

xGGGATAAGCCTGGGAAACTGGGTCTAATACC (SEQ ID: 2), wherein x is nothing or is a sequence recognized by an RNA polymerase and each said oligonucleotide is about 22 to about 100 bases in length.

Sub K1
40. (Amended) An oligonucleotide of about 20 to about 100 bases in length comprising a nucleic acid sequence selected from the group consisting of
xGCCGTCACCCACCAACAAGCT (SEQ ID: 1),
xGGGATAAGCCTGGGAAACTGGGTCTAATACC (SEQ ID: 2),
xCCAGGCCACTTCCGCTAACC (SEQ ID: 6), xCGCGGAACAGGCTAAACCGCACGC
(SEQ ID: 7), and their fully complementary sequences of the same length, wherein x is nothing or is a sequence recognized by an RNA polymerase.

41. (Amended) A kit for amplifying and detecting *Mycobacterial* nucleic acid, containing a first oligonucleotide of about 24 to about 100 bases in length comprising a nucleotide base sequence GTCTTGTTGGTGGAAGCGCTTTAG (SEQ ID: 3) and at least one additional oligonucleotide of about 23 to about 100 bases in length selected from the group consisting of
xGCCGGTCACCCACCAACAAGCT (SEQ ID: 1) and
xGGATAAGCCTGGGAAACTGGGTCTAATACC (SEQ ID: 2), wherein x is nothing or is a sequence recognized by an RNA polymerase.

#4
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K1

42. (Amended) A kit for amplifying and detecting *Mycobacterial* nucleic acid, containing a first oligonucleotide of about 23 to about 100 bases in length comprising a nucleotide base sequence GGAGGATATGTCTCAGCGCTACC (SEQ ID: 8) and at least one additional oligonucleotide of about 20 to about 100 bases in length selected from the group consisting of xCCAGGCCACTTCCGCTAACC (SEQ ID: 6) and xCGCGGAACAGGCTAAACCGCACGC (SEQ ID: 7), wherein x is nothing or is a sequence recognized by an RNA polymerase.

H5
Sub
K1

54. (Amended) The composition of claim 27 [wherein] comprising a reverse transcriptase [comprises] which is both said DNA-dependent DNA polymerase and said RNA-dependent DNA polymerase.

#6
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K4

100. (Amended) A kit for amplifying *Mycobacterial* nucleic acid, containing a first oligonucleotide comprising xCCAGGCCACTTCCGCTAACC (SEQ ID: 6), and a second oligonucleotide comprising x'CGCGGAACAGGCTAAACCGCACGC (SEQ ID: 7), wherein x is nothing or is a sequence recognized by an RNA polymerase and x' is nothing or is a sequence recognized by an RNA polymerase.

Sub
#7 K6

101. (Amended) A composition useful in the detection of *Mycobacterium tuberculosis* comprising at least one oligonucleotide, or composition containing an oligonucleotide, selected from the group consisting of:

sub
K6
cost
H7
conclude

a) a nucleic acid hybridization assay probe from about 10 to about 100 nucleotide bases in length comprising an oligonucleotide which will hybridize to at least 10 contiguous bases of a nucleotide base sequence region of a target *Mycobacterium tuberculosis* nucleic acid, said region selected from the group consisting SEQ ID NO: 3, SEQ ID NO: 8, and the sequences perfectly complementary thereto;

b) an oligonucleotide from about 10 to about 100 nucleotide bases in length able to bind to or extend through a region of *Mycobacterium tuberculosis* nucleic acid, said region consisting of a nucleotide base sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 22, SEQ ID NO: 23, and the sequences perfectly complementary to these sequences,

c) a kit comprising the oligonucleotide of [step] b), and

d) a specifically detectable nucleic acid hybrid formed under nucleic acid hybridization conditions between the hybridization assay probe of [step] a) and a nucleic acid comprising a *Mycobacterium tuberculosis* nucleotide base sequence.

add
K7

REMARKS

Claims 29, 30, 32, 33, 39-42, 54, 100 and 101 have been amended. Claims 24-42, 48-51, and 54-101 are pending in the above captioned application (attached as Appendix B).